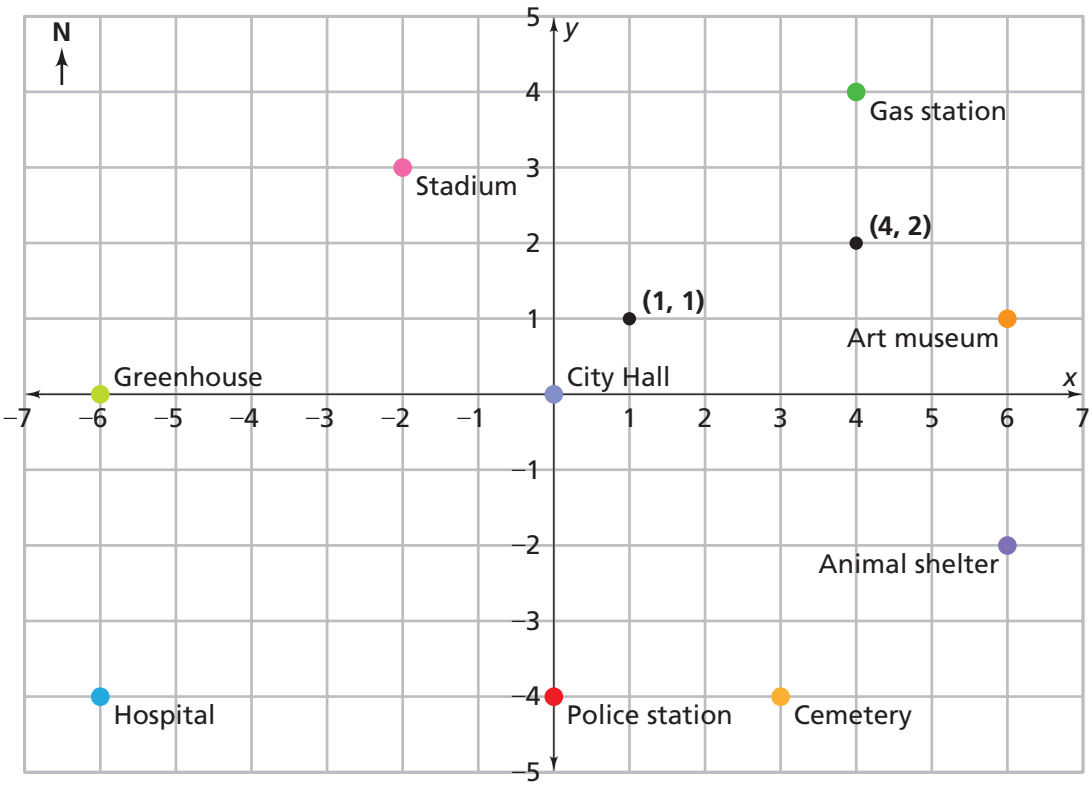
1.2 Planning Parks

The Euclid City Council is developing parks with geometric shapes. For some of the parks, the council gives the park designers constraints. For example, Descartes Park must have a border with vertices (1, 1) and (4, 2).



Problem 1.2 Shapes on a Coordinate Grid

Be prepared to explain your answers.

A. Suppose the park is to be a square. What could the coordinates of the other two vertices be? Give two answers.

B. Suppose the park is to be a nonsquare rectangle. What could the coordinates of the other two vertices be?

C. Suppose the park is to be a right triangle. What could the coordinates of the other vertex be?

D. Suppose the park is to be a parallelogram that is not a rectangle. What could the coordinates of the other two vertices be?

ACE **Homework starts on page 12.**